

REMARKS

35 U.S.C. § 112 Claim Rejections

The Examiner has rejected claim 3 as not being enabled under 35 U.S.C. § 112 ¶ 1 because the Examiner argues that Applicant has claimed that “each” unit cell has two lateral arms, but because the figures show the cells being overlapped, the lateral arms are actually shared by the unit cells. In response to the Examiner’s comments, Applicant has amended claim 3 to recite that the “lateral arms of each unit structure are shared with adjacent unit structures.” Applicant respectfully submits that this amendment obviates the Examiner’s rejection since the claim now clearly limits the claimed invention to a unit cell arrangement where each unit cell has two lateral arms and the lateral arms are shared with adjacent unit cells. Applicant has also incorporated this amended limitation into new claims 23 and 27. Accordingly, the Examiner may now withdraw this rejection.

The Examiner has also rejected claim 3 as being indefinite under 35 U.S.C. § 112 ¶ 2 because the Examiner argues that the terms “said serpentine pattern” and “the same ring structure” lack antecedent basis. In response to the Examiner’s comments, Applicant has amended claim 3 to depend from claim 2 instead of claim 1. This amendment provides an antecedent basis for the claimed “serpentine pattern” since claim 2 recites “a serpentine pattern.” Applicant has also amended claim 3 to recite that each unit structure is inverted with respect to “circumferentially adjacent unit structures.” The phrase “the same ring structure” has been deleted from the claim. Therefore, this amendment obviates the Examiner’s rejection to the term “the same ring structure.” Applicant has also incorporated these amended limitations into new claims 23 and 27. Accordingly, the Examiner may now withdraw these rejections.

The Examiner has also rejected claims 7-10 as being indefinite under 35 U.S.C. § 112 ¶ 2 because the Examiner argues that the term “said plurality of ring structures” lacks antecedent basis. In response to the Examiner’s comments, Applicant has amended claims 7 and 8 to recite that the one or more pads extend from “at least one of said first, second, third, fourth, fifth, sixth or seventh ring structures.” The antecedent basis for the ring structures is provided in claim 1, which recites “first and second ring

structures” etc. Applicant respectfully submits that this amendment obviates the Examiner’s rejections by making the terminology consistent in the claims. Accordingly, the Examiner may now withdraw this rejection.

The Examiner has also rejected claim 10 as being indefinite under 35 U.S.C. § 112 ¶ 2 because the Examiner argues that the phrase “selected from the group consisting of” should be used in Markush type claims. In an effort to expedite prosecution of Applicant’s claims, Applicant has amended claim 10 as suggested by the Examiner. Accordingly, the Examiner may now withdraw this rejection.

The Examiner’s rejection of claim 11 is moot since Applicant has cancelled claim 11.

35 U.S.C. § 102 Claim Rejections

The Examiner has rejected claims 1-8 and 11-22 as being anticipated under 35 U.S.C. § 102(b) by Schmitz et al. (EP 0 958 794 A2). The Examiner has also rejected claims 11-22 as being anticipated under 35 U.S.C. § 102(e) by Levinson (U.S. Patent No. 6,352,522). The Examiner has also rejected claims 1-3, 7, 9, 11, 15 and 17-19 as being anticipated under 35 U.S.C. § 102(e) by Penn et al. (U.S. Patent No. 6,796,997). The Examiner has also rejected claim 10 as being unpatentable under 35 U.S.C. § 103(a) over Penn et al.

Applicant has carefully considered the Examiner’s comments. In order to expedite prosecution of Applicant’s application, Applicant has cancelled claims 11-22 and has added new claims 23-30 for consideration. Claim 1 has also been amended to more clearly define the claimed invention. Applicant respectfully submits that the prior art of record does not disclose all of the limitations of the claims as now presented. Each of the claims are distinguishable from Schmitz et al., Levinson and Penn et al. as explained below.

Claim 1 requires a stent structure that has at least seven ring structures and six groups of connector segments. Each of the connector segments have an undulating portion. Circumferentially adjacent undulating portions of the third and fourth connector segments are axially displaced from each other. Circumferentially adjacent undulating portions of the first, second, fifth and sixth connector segments are axially aligned with each other. In other words, the stent structure has a first portion with two axially

adjacent connector segments where the undulating portions are axially aligned with circumferentially adjacent undulating portions. Adjacent the first portion is a second portion of the stent structure with two axially adjacent connector segments where the undulating portions are axially displaced from circumferentially adjacent undulating portions. Adjacent the second portion is a third portion of the stent structure with two axially adjacent connector segments where the undulating portions are axially aligned with circumferentially adjacent undulating portions.

Claim 23 requires that the stent structure be made up of ring structures comprising unit structures that have lateral arms and a central region between the arms. The central region is required to have a peak between first and second valleys. The stent structure also has a first, second and third portion with first, second and third connector segments, respectively. Each of the connector segments has an undulating portion. The undulating portions of the second connector segments are axially displaced from the undulating portions of circumferentially adjacent connector segments. The undulating portions of the first and third connector segments are axially aligned with the undulating portions of circumferentially adjacent connector segments.

Claim 27 requires that the stent structure be made up of ring structures comprising unit structures that have lateral arms and a central region between the arms. The central region is required to have a peak between first and second valleys. The stent structure also has a first, second and third portion with first, second and third connector segments, respectively. Each of the connector segments has an undulating portion. The number of second connector segments is about twice the number of first connector segments and about twice the number of third connector segments.

In an effort to help the Examiner understand Applicant's claim limitations, Applicant is providing the Examiner with two marked-up copies of Figure 8 from Applicant's specification, which are labeled Attachment A and B and are attached at the end hereto. Figure 8 is a preferred embodiment of the inventions claimed in claims 1-10 and 23-30. Attachment A is marked-up with claim terminology used in amended claim 1. Attachment B is marked-up with claim terminology used in new claims 23 and 27. As shown in Figure 8, the claimed invention relates to a unique stent structure with connector segments that have undulating portions. Relative to circumferentially

adjacent undulating portions, the undulating portions are alternatively axially aligned and displaced from each other along the length of the stent. In addition, as claimed in claim 27, there are twice as many axially displaced connector segments in the second portion of the stent than the axially aligned connector segments in the first and third portions of the stent. As claimed in claims 23 and 27, the ring structures are also formed from unique unit structures with lateral arms and a central region with a peak and valleys. None of the prior art of record discloses all of the limitations of Applicant's claims as presented. In particular, there is no embodiment in Schmitz et al., Levinson or Penn et al. that discloses the combination of features claimed in claims 1, 23 and 27. Accordingly, Applicant's independent claims are allowable over the prior art of record.

In addition to claims 1, 23 and 27, the prior art of record does not disclose the additional limitations of claims 2-10, 24-26 and 28-30. Each of these claims depends from either claim 1, 23 or 27. Thus, claims 2-10, 24-26 and 28-30 include all of the limitations of the claims they depend from. Because claims 1, 23 or 27 are allowable as presented, all of the claims depending therefrom are also allowable. Thus, any further arguments that could be made at this time would be superfluous and are unnecessary.

Conclusion

In response to the Examiner's § 112 rejections, Applicants have amended claims 3, 7-8 and 10 to obviate the Examiner's rejections. In response to the Examiner's § 102 rejections, Applicants have amended claim 1, cancelled claims 11-22, and have added claims 23-30. None of the prior art of record discloses all of the limitations in the claims as now presented. Thus, Applicant's claims are allowable. Accordingly, Applicant requests reconsideration and allowance of the application.

Respectfully submitted,



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